REMARKS/ARGUMENTS

In the Office Action, claims 1, 5, 23, 32 and 33 were objected to. Claims 7, 8, 23 and 33 were alleged to be indefinite regarding improper Markush format. Claims 1-5, 8-28 (believed to be 18-28), 30, and 32-34 were asserted to be indefinite for referring to nucleic acid sequences rather than amino acid sequences. Claims 7 and 8 were asserted to be indefinite as allegedly unclear. Claim 35 was alleged to recite nonstatutory subject matter for not referring to an isolated antibody. Claims 18-21, 23-28 and 30 were objected to under 35 USC 112, first paragraph for allegedly lacking enablement. Claims 7 and 8 were rejected as allegedly anticipated by Queen et al. (USPN 5,530,101). These objections are addressed in turn below. Reconsideration is respectfully requested.

New Claim Objections

1. Claims 1 and 33 have been amended to address the Examiner's objections under items 6a, 6b, 6h and 6i. Claims 1, 32 and 33 have also been amended to refer to amino acids of SEQ ID NOs: 6 and 7 rather than SEQ ID NO: 1 and 2. SEQ ID NO: 6 and 7 set forth the amino acid sequences encoded by the nucleotide sequences set forth in SEQ ID NO: 1 and 2.

2. Claim 1 has been amended to address the Examiner's objections under item 6c. The amendments to claim 23 render the Examiner's objections under items 6d, 6e, 6f and 6g moot.

Claim Rejections – 35 USC 112, second paragraph

3. Claims 7, 18, 23 and 33 have been amended to delete the term "and/or" from these claims in order to overcome the objection to these claims and claim 8 as being indefinite.

4. Claims 1, 32 and 33 have also been amended to refer to amino acids of SEQ ID NO: 6 and 7 rather than SEQ ID NO: 1 and 2. SEQ ID NO: 6 and 7 set forth the amino acid sequences encoded by the nucleotide sequences set forth in SEQ ID NO: 1 and 2.

5. Claim 7 has been amended to refer to an isolated nucleic acid, which comprises nucleic acids Nos. 172-201, 244-294 and 385-417 of SEQ ID NO:1; nucleic acids Nos. 130-174, 220-240 and 337-363 of SEQ ID NO:2; or both nucleic acids Nos. 172-201, 244-294 and 385-417 of SEQ ID NO:1 and nucleic acids Nos. 130-174, 220-240 and 337-363 of SEQ ID NO:2.

Claim Rejections – 35 USC 101

6. Claim 35 has been amended to include the term "isolated" to describe the claimed antibody. Withdrawal of the rejection is respectfully requested.

Claim Rejections – 35 USC 112, first paragraph (enablement)

7. The examiner has maintained the enablement objection to claims 18-21, 23-28 and 30. The examiner states that while the specification is enabling for (i) a pharmaceutical composition comprising the antibody of claim 1 and (ii) a method of preventing or treating TLR2-induced septic shock in a mammal comprising administering the antibody to the mammal, the specification does not reasonably provide enablement for pharmaceutical compositions comprising nucleic acids or a vector; a method of preventing or treating a TLR2 mediated process; and a method of treatment by administering a nucleic acid or vector.

References to a pharmaceutical composition comprising a nucleic acid or a vector have been deleted from claim 18. Claim 18 has therefore been restricted to the subject matter which the examiner has acknowledged as being enabled by the specification. The applicant submits that claim 18 and dependent claims 19 to 21 therefore satisfy the requirements for enablement.

References to a method of treatment by administering a nucleic acid or vector have been deleted from claim 23. Claim 23 has therefore been restricted to a method of treatment or

prevention by administering the antibody of claim 1 or a fragment thereof, which the examiner has acknowledged as being enabled by the specification.

Regarding a method of preventing or treating a TLR2 mediated process other than TLR2-induced septic shock, the examiner considers that the specification only discloses that in mice given T2.5 either prior or up to 2 hours after *B. subtilis* microbial challenge, all *B. subtilis* challenged mice survived. The examiner notes that the specification adds that treatment with T2.5 3 hours after potentially lethal injection saved 75% of the mice challenged. However, the examiner considers that the specification does not teach any methods or working examples that indicated that TLR2 cross-reactive antibodies prevent or treat all TLR2-mediated processes.

Claim 23 has been amended to refer to TLR2-mediated inflammation. The applicant submits that the specification is enabling for a method of preventing or treating TLR-2 mediated-inflammation in a mammal comprising administering the TLR2 cross-reactive antibody to the mammal as the specification teaches the use of TLR2 cross-reactive antibodies to inhibit mediators of inflammation. Page 16, lines 11 to 13 state that "Systemic application of a specific antibody of the invention, i.e. T2.5 (see experimental part) upon lipopeptide challenge inhibited inflammatory mediator release such as TNF alpha…". Support for this statement is found throughout the examples provided in the application, and, in particular, in Figures 3(c) and (d), 5(a), 11 and 12 which show that T2.5 inhibited a TLR2 mediated increase in the pro-inflammatory cytokine TNF alpha. The examples further show that T2.5 inhibited a TLR2 mediated increase in the transcription factor NF-kappa B, as shown in Figures 3(a), (b), (e), (f) and (g) and that subcellular NF-kappa B translocation was blocked upon TLR2 specific challenge of primary human macrophages (page 26, lines 29 to 30). The examples also show that T2.5 inhibited a TLR2 mediated increase in the pro-inflammatory cytokine IL-8 (page 24, line 31 to page 25, line 3) and inhibited a TLR2 mediated increase in IL-6 (Fig. 5(c)) and IL-12p40 (Fig. 5(d)). The applicant therefore submits that the specification is enabling for a method of preventing or treating TLR-2 mediated-inflammation in a mammal comprising administering the TLR2 cross-reactive antibody to the mammal as the specification shows that the antibody of the invention inhibits a TLR2 mediated increase in the above mentioned mediators of inflammation.

Accordingly, withdrawal of the rejection under 35 USC 112, first paragraph, is respectfully requested.

Claim Rejections – 35 USC 102 (novelty)

8. As noted above, claim 7 has been amended to refer to an isolated nucleic acid, which comprises nucleic acids Nos. 172-201, 244-294 and 385-417 of SEQ ID NO:1; nucleic acids Nos. 130-174, 220-240 and 337-363 of SEQ ID NO:2; or both nucleic acids Nos. 172-201, 244-294 and 385-417 of SEQ ID NO:1 and nucleic acids Nos. 130-174, 220-240 and 337-363 of SEQ ID NO:2. Claim 7 does not therefore extend to fragments having one or more nucleic acids within the ranges recited in the claim. Queen et al. does not therefore anticipate claims 7 and 8.

All the objections and rejections having been addressed above, withdrawal of same is respectfully requested. It is believed that no new matter has been added by this amendment, and Applicants respectfully request entry of same into the present application.

CONCLUSION

In light of the Amendments and Remarks herein, Applicant submits that the claims are in condition for allowance and respectfully request a notice to this effect.

Respectfully submitted,

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